

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph on page 3, lines 3 – 10 with the following paragraph:

A variable gain echo suppressor disclosed by McCaslin, (U. S. Pat. No. 5,668,794) uses normalized near-end and far-end power levels to define an associated power ratio. In McCaslin, near-end and far-end power detectors detect the near-end and far-end signal powers which are normalized. A controller that sets the operation of the attenuators uses near-end and far-end signal powers normalized to the associated background noise. An attenuation value, or factor, is determined using the ratio of the normalized near-end and far-end signal powers to locate a scaling factor from predetermined far-end and near-end tables.

Please replace paragraph beginning on page 15, line 25 and ending on page 16, line 7, with the following paragraph:

Next a suppression value, A, is calculated in block 650 by summing the product of the normalized far-end power multiplied by a first weighted factor, W_1 , plus the product of the normalized near-end power multiplied by a second weighted factor, W_2 to produce a suppression value in decibels. The formula for the calculation is $A = W_1 P_{\text{near-end}} \frac{\text{far-end}}{\text{near-end}} + W_2 P_{\text{far-end}} \frac{\text{near-end}}{\text{far-end}}$ where predetermined values for W_1 and W_2 are derived in block 630 based on the value of $P_{\text{near-end}}$ according to:

$$P_{\text{near end}} < C_1 \quad W_1 = 1.00 \quad W_2 = 0.50$$

$$C_1 \leq P_{\text{near end}} < C_2 \quad W_1 = 0.50 \quad W_2 = 0.25$$

$$P_{\text{near end}} \geq C_2 \quad W_1 = 0.00 \quad W_2 = 0.50$$

where $-6 \leq C_1 < 0$ and $0 \leq C_2 < 6$.

Please replace paragraph on page 16, lines 17 – 25 with the following paragraph:

Using the present gain control method for acoustic echo cancellation and suppression, when far-end speech is present and near-end speech is not, P_x is greater than P_y , P_d and P_e . Therefore, the normalized $P_{\text{far-end}}$ is large. When convergence is reached, $P_{\text{near-end}}$ increases negatively because the power level of the filtered received signal P_y increases while the power level of the echo signal P_d remains relatively constant, therefore causing the power level of error signal P_e to go negative. Thus, $A = (1.0)(P_{\text{far-end}}) + (0.5)(-P_{\text{near-end}})$, resulting in a small suppression value A . The smaller the ~~attenuation~~ factor suppression value A , the greater the attenuation within the echo suppressor stage.